



RAW SEQUENCE LISTING ERROR REPORT

LET.

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/936,133
Source: P4/09
Date Processed by STIC: 1/24/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
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Revised 01/29/2002

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PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002
TIME: 12:52:50

Input Set : A:\ES.txt
Output Set: N:\CRF3\01242002\I936133.raw

pp 2-11
Does Not Comply
Corrected Diskette Needed

W--> 3 Sequenzprotokoll *delete*
6 <110> APPLICANT: Schering Aktiengesellschaft
8 <120> TITLE OF INVENTION: Menschliche Nukleinsuresequenzen aus homo sapiensen
9 Endothelzellen
11 <130> FILE REFERENCE: 51690AWOM1XX00-P
13 <140> CURRENT APPLICATION NUMBER: US/09/936,133
14 <141> CURRENT FILING DATE: 2001-12-20
16 <160> NUMBER OF SEQ ID NOS: 60

*Use English
for a U.S.
application*

ERRORED SEQUENCES

18 <210> SEQ ID NO: 1
19 <211> LENGTH: 1835
20 <212> TYPE: DNA
21 <213> ORGANISM: homo sapiens
23 <400> SEQUENCE: 1
p.2

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002
TIME: 12:52:51

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Output Set: N:\CRF3\01242002\I936133.raw

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61 <213> ORGANISM: homo sapiens
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67 tcaacttact tctgtggcc cattagggaag gtggtgacct cgggagctat ttgctgtttg 180
68 agtgcacaca cctggaaaca tactgctctc attttttcat ccacatcagt gagaaatgag 240
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70 tttattacag gactaaaagt tcattattgt ttgttaaagga tgaattcata acctctgcag 360
71 agttatagtt catacaagct tgatttccat ttataaaggc agaaagtcct tgttttctct 420
72 aaatgtcaag ctttgactga aaactcccgt tttccagtc actggagtgt gtgcgtatga 480
73 aagaaaatct ttagcaatta gatgggagag aagggaata gtacttgaaa tgtaggccct 540
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85 gacactctgg gttgattgtg aaagaaattg ggtcttcac ctcgagctct tcagaaacag 180
86 ttgttaagct tcgtggccag agtactgatt ctcttcaca gactatatgt cggaaaccaa 240
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105 tgaagatggt cttctccgtg gggcgagaga caaagcagtc cagcaggtag gggcagggtg 360
106 ctgctggca cacaacacg ggtccatgg tccagccgta caggcgccac tggccataga 420
107 ggaagcctgc ctctagcaca ctcttgaga gcacactggc gacatagggt cccatcagtg 480
108 ctcccgcgat gcgcaggcga ccactctctg ccaccgagat cttggccatc tgacgtctta 540
109 cggccgccag cgcccgtcc acctgtgggt ccttgccgg cagtgccgc agctccccct 600

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(global error)

insert cumulative base totals at right margin of each line

same error

same

P.3

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002

TIME: 12:52:51

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Output Set: N:\CRF3\01242002\I936133.raw

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112 aggcctgggtc atagcagacg ttggtgcagc ctggctgggc cgtgttacac tcgaaatctg 780
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125 <400> SEQUENCE: 5

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148 <213> ORGANISM: homo sapiens

150 <400> SEQUENCE: 6

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156 ccaccgagcg ccgagccgag ggcctataca gtcagctctc agggctcacg gctcccaggt 300
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163 aaacccggga gctgcagcac caagagcgcc actggccaag gagcaactgc aaaaggtgca 720
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002

TIME: 12:52:51

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Output Set: N:\CRF3\01242002\I936133.raw

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195 <213> ORGANISM: homo sapiens

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201 ttttcaaaa tcatgctt acagatccag atttcaggaa acaatacat aggggactaa 180

202 ctttcttgt tcatattagt ttttctcct tgcacccagc tatataatat gaggaagtat 240

203 tgacttttta aaagtgttt agttttccat ttctttgata tgaaaagtaa tatttcggga 300

204 gaacctgag ctattaataa tctatgtggc tagtgcgtat atattgtct gaatttgttc 360

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207 <210> SEQ ID NO: 8

208 <211> LENGTH: 157

209 <212> TYPE: DNA

210 <213> ORGANISM: homo sapiens

212 <400> SEQUENCE: 8

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219 <211> LENGTH: 561

220 <212> TYPE: DNA

P.5

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002

TIME: 12:52:51

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223 <400> SEQUENCE: 9

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239 <213> ORGANISM: homo sapiens

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 267 gaggggttac agatgcatat gtccaatata aaatagaaaa tatattaacg tttgaaatta 1500

E--> 268 aaaaaaaaa *same*

270 <210> SEQ ID NO: 11

271 <211> LENGTH: 389

272 <212> TYPE: DNA

273 <213> ORGANISM: homo sapiens

275 <400> SEQUENCE: 11

277 gggcagggtga tcagggcaca catttccgt ccattgagac agtagcattc ccggcaccca 60

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002

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Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

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278 tcgtgccagc tctctcatt tttatgatga tgaccatcca cgggtgagaca agtgcccgac 120
279 aggatgggtg gccagctga agcacaggcc gctctgact tgcagataag acagccgtga 180
280 ctgtctgct ggaacccaa ggggcagatc ttactgcatg agagctctgg acatttctta 240
281 cagcgacaga tgtcacagcc gtgcttattc ttcagcaatc caagtggaca atacttgta 300
282 cagattatgg gtctgactt cttgggcctt gggcggcact cacagatctc acagtttttg 360
E--> 283 acctcggcgc cgaccacgct ggggtaccga same
285 <210> SEQ ID NO: 12
286 <211> LENGTH: 981
287 <212> TYPE: DNA
288 <213> ORGANISM: homo sapiens
290 <400> SEQUENCE: 12
292 tttttttttt ttggattgca aaaattttatt aaaattggag acactgtttt aatcttcttg 60
293 tgccatgaga ctccatcagg cagtctacaa agaccactgg gaggtgagg atcacttgag 120
294 cccagaagtt tgaggctgta gtaagcttca aaggccactg cactctagct tgggtgaggc 180
295 aagacccttt caagcagtaa gctgcatgct tgcttggtgt ggtcattaaa aaccctagtt 240
296 taggataaca acatattaat cagggcaaaa tacaaatgtg tgatgcttgt tagtagagta 300
297 acctcagaat caaaatggaa cgtttttaca gtgatatcat tatatttcat ttggcagaat 360
298 cattacatca ttggttacac tgaaaatcat cacatgtacc aaaagctgac tcacctagtt 420
299 taggataaca ggtctgcctg tttgaagatg aaaaataata cccattttaa atttgccta 480
300 ctcaattttc ttctcagtca ctttttaact tttaaacagc taatcactcc catctacaga 540
301 ttaaggtgta tatgccacca aaaccttttg ccaccttaaa aatttccttc aaagttttaa 600
302 ctaatgcctg cttttcttca atcatgaatt ctgagtcctt tgcttcttta aaacttgctc 660
303 cacacagtgt agtcaagccg actctccata cccaagcaag tcatccatgg ataaaaacgt 720
304 taccaggagc agaaccatta agctggtcca ggcaagttgg actccaccat ttcaacttcc 780
305 agctttctgt ctaatgcctg tgtgccaatg gcttgagtta ggcttgctct ttaggacttc 840
306 agtagctatt ctcatccttc cttggggaca caactgtcca taaggtgcta tccagagcca 900
307 cactgcatct gcaccagca ccatacctca caggagtcca ctcccacgag ccgctgtat 960
E--> 308 ataagagttc ttttgatgac g same
310 <210> SEQ ID NO: 13
311 <211> LENGTH: 401
312 <212> TYPE: DNA
313 <213> ORGANISM: homo sapiens
315 <400> SEQUENCE: 13
317 ttaactacag cttcagcaga caactaaaga gactgcatta aggtgatttc tctggctata 60
318 aagagagccc ggccgcagag catgtgactg ctgggacctc tgggataggc aacactgccc 120
319 tctctcccc agagcgacct ccggggcagg tggggcccca agaatgacc cagcaactgc 180
320 tccctaccca gcacactctc ttacttgcca cctgcaatta tgetgtgaag atgactgggt 240
321 gtggatcatc cgattcagag aaatcaagat ctatgaccat tttaggcaaa gagagaaact 300
322 tggagaattg ctgaggacta ctgaaccttg ttttgctttt ttaaaaaata ctaaactctc 360
E--> 323 acttcagcat atttagttgt cattaaaatt aagctgatat t same
325 <210> SEQ ID NO: 14
326 <211> LENGTH: 1002
327 <212> TYPE: DNA
328 <213> ORGANISM: homo sapiens p.7
330 <400> SEQUENCE: 14
332 gacaataata aaagtggaaa caagcataaa ttgcagacat aaaataatct tctggtagaa 60
333 acagttgtgg agaacagggt gagtagagca acaacaacaa aagcttatgc agtcaccttc 120
334 tttgaaaatg ttaaatacaa gtcctattct ctttgccag ctgggttttag ctgaggtag 180
335 ccaattactt ctcttaaggt ccatggcatt cgccaggatt ctataaaagc caagttaact 240

```


RAW SEQUENCE LISTING

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Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

```

336 gaagtaata tctggggccc atcgacccc cactaagtac tttgtcacca tgttgtatct 300
337 taaaagtcac ttttcaactgt ttgactcaga atttgggact tcagagtcaa acttcattgc 360
338 ttactccaaa cccagtttaa ttccccactt ttttaagtag gcttagcttt gagtgatttt 420
339 tggctataac cgaaatgtaa atccaccttc aaacaacaaa gtttgacaag actgaaatgt 480
340 tactgaaaac aatgggtgcca tatgtcccaa agacatttcc ccaagataac tgccaaagag 540
341 tttttgagga ggacaatgat cattttattat gtaggagcct tgatatctct gcaaaataga 600
342 attaatacag ctcaaattgga gtagtaacca agcttttctg cccaggaagt aacaaacatc 660
343 actacgaaca tgagagtaca agaggaaact ttcataatgc attttttcat tcatacatc 720
344 attcaataaa cattagccaa gctaattgct caagccactg tgccaggat taacaatata 780
345 acaacaataa aagacacagt ccttcctctc aaggtgttca gtctagtagg gaagatgatt 840
346 attcattaaa atttttggtg catcagaatc atgaggagct tgtcaaaaat gtaaatcct 900
347 gcctatgttc tcagatattc tgggttaggtc agggatggga acccaaatc aattctttta 960

```

E--> 348 acaaacacta aaggtgatc taacacaggc ggtgtgagga cc

same

350 <210> SEQ ID NO: 15

351 <211> LENGTH: 280

352 <212> TYPE: DNA

353 <213> ORGANISM: homo sapiens

355 <400> SEQUENCE: 15

```

357 cgagggtggc caccgtgtc tggctcgaga tttttaaatg aggattacat tatcctatct 60
358 ataattattcc tattctaata tattgtatcc ttacaattaa atgtatcaaa taattcttaa 120
359 aacattattt agaaacaaac tgcctaatac cttataagac taaaaaaatc accaagatga 180
360 aactgtatta tgactctcaa tttttaaaca tttaaaaaaa tgttagtggt tgtaagcac 240

```

E--> 361 caatcttaac ttttcacct gccgggagg cgcctcagg

same

363 <210> SEQ ID NO: 16

364 <211> LENGTH: 2041

365 <212> TYPE: DNA

366 <213> ORGANISM: homo sapiens

368 <400> SEQUENCE: 16

```

370 cccccgcag aactcccccc tgggaatagga tttttaaac ccttgacaat tagaaatcct 60
371 atagagggtta gcatttttta ggtaaaaata tgggtgccc tacagggatc atgcaacttc 120
372 cttaaaacca attcagcaca tatgtataaa gaaccctttt taaaaacatt tgtacttgaa 180
373 atacagacac agtgatgtg aagacactaa acaaaaactg aaaagtacta taccttgata 240
374 aattttgtta ttgccttctt tagagacttt ataattctta gttgattttc aaggacttga 300

```

```

375 atttaataat ggggtaatta cacaagacgt aaaggatttt taaaaaaca gtattttttt 360
376 ttacctctag catcaattct tttataaaga atgctaaata aattacattt tttgttcagt 420
377 aaaactgaag atagaccatt taaatgcttc taccaaattt aacgcagctt aattagggac 480
378 caggtaacata ttttctctg aacatttttg gtcaagcatg tctaaccata aaagcaaatg 540
379 gaattttaag aggtagattt tttttccatg atgcattttg ttaataaatg tgtcaagaaa 600
380 ataaaaacaa gcactgagtg tgttctcttg aagtataagg gtctaataaa aaataaaaaga 660
381 tagatatattg ttatagtctg acattttaac agtcatagta ttagacgttt cgtgaccagt 720
382 gcatttttga ctctctcagg atcaaaatac gagtctgcca actgtattaa atcctcctcc 780
383 accccctcca ccagttgggt cacagcttcc tgggtgggtc ttgtcatcaa atccattggg 840
384 ccgaaatgaa catgaagcag atgcagcttg gagggcccg gctcagacat tcaactcttg 900
385 ttctgtgaaa tatagtttat tgtcttttgt tatagcatcc ataagttctt tctgtagagg 960
386 tgggtctcca tttatccaga gtccactggt tgggttatta ccaactaaac cattagtact 1020
387 atgctgtttt ttatacaaaa gcacataagc tgtgtccttt ggaaacctgc tcgtaatttt 1080
388 ctggactgac tgaaatgaag taaatgtcac tctactgtca ttaataaaaa acccattctt 1140
389 ttgacatttc cttattttcc aaatcctggt caaaaactgc actgggacta tctctcccta 1200
390 gtaaatgact ctgggaggat gctaattgcca gagcctcaga ctgggtgtac atctgatatg 1260

```


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Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

```

391 aagagtctgt acttgtgata tttctggcat aagaatagta atgcccactt tcagaggata 1320
392 taccagagtg aaccacaacg gaacttaata gatagggcac caattttgtg caggaagctt 1380
393 catcagtcct tgaaggcttt aatttttttag caaggttctc actaagatca gtgaagtcaa 1440
394 catctacaga ccaactttct gacaatgaag agaagaagt aattcttcta actggcaact 1500
395 ccaaaaccag tggccagtga tacattgtct aaaattttoc ttctcacatg atacttctga 1560
396 tcatatgaaa atctcaggag agtaagaata aggtattcag gttcctccgt gatttgcata 1620
397 gttttctcag cattttgcag agaggcacag ttttcacaat aatattggtt atcaccagta 1680
398 agaattctct gagcccaaaa aataatttag taagtcagtt actgaagggtg tggtttcacc 1740
399 tcccggtttc tgaggtagat ctttattaac aagaattctg ttagattcgt tagggacaga 1800
400 agtgttttca gaacagtaaa actcattagg aggactgcct atgggttttt cattcacaag 1860
401 tgagtcacag atgaaggcag ctgttggttg attataaact actggctctt ctgaaggacc 1920
402 gggtagacag gcttgcatga gaccaccatc ttgtatactg ggtgatgatg ctggatcttg 1980
403 gacagacatg ttttccaaag aagaggaagc acaaaacgca agcgaagatg ctgtaaaggc 2040

```

E--> 404 t

406 <210> SEQ ID NO: 17

407 <211> LENGTH: 235

408 <212> TYPE: DNA

409 <213> ORGANISM: homo sapiens

411 <400> SEQUENCE: 17

413 cgccccgggc aggtgtcagg ggttccaaac cagcctgggg aaacacagcg tagacccttc 60

414 acctctacaa ataaaaaatt aaaaaattag ccagggtgtg cagcgaacaa ctgtagtctc 120

415 agatactcag gagactgagc tggaaaggat cacttgagcc caagaagttc aaggttacag 180

E--> 416 tgggccacga tcatgtcatt acactccagc ttgggtgaca aaatgagact gtcta *same*

418 <210> SEQ ID NO: 18

419 <211> LENGTH: 2732

420 <212> TYPE: DNA

421 <213> ORGANISM: homo sapiens

423 <400> SEQUENCE: 18

425 gtgtggagtt tcagctgcta ttgactataa gagctatgga acagaaaaag cttgctggct 60

426 tcatgttgat aactacttta tatggagctt cattggacct gttaccttca ttattctgct 120

427 aaatattatc ttcttggtga tcacattgtg caaaatggtg aagcattcaa acactttgaa 180

428 accagattct agcaggttgg aaaacattaa gtcttgggtg cttggcgctt tcgctcttct 240

429 gtgtcttctt ggcctcacct ggtccttttg gttgcttttt attaatgagg agactattgt 300

430 gtgtgcatat ctcttcacta tttttaatgc tttccaggga gtgttcattt tcattcttca 360

431 ctgtgctctc caaaagaaag tacgaaaaga atatggcaag tgcttcagac actcatactg 420

432 ctgtggaggg ctcccaactg agagtcccca cagttcagtg aaggcatcaa ccaccagaac 480

433 cagtgtctgc tattcctctg gcacacagag tcgtataaga agaattgtga atgatactgt 540

434 gagaaaaaaa tcagaatctt cttttatctc aggtgacatc aatagcactt caacacttaa 600

435 tcaagggtgg ataaatctta atatattatt acaggactga catcacatgg tctgagagcc 660

436 catcttcaag atttataatc ttttagaggac attcactgaa caatgccagg gatacaagtg 720

437 coattgatac tctaccgcta aatggtaatt ttaacaacag ctactcgtg cacaagggtg 780

438 actataatga cagcgtgcaa gttgtggact gtggactaag tctgaatgat actgcttttg 840

439 agaaaaatgat catttcagaa ttagtgacaa acaacttacg gggcagcagc aagactcaca 900

440 acctcgagct cacgctacca gtcaaacctg tgattggagg tagcagcagt gaagatgatg 960

441 ctattgtggc agatgcttca totttaatgc acagcgacaa cccagggtg gagctccatc 1020

442 acaaagaact cgaggcacca cttattctc agcggactca ctccctctg taccaacccc 1080

443 agaagaaagt gaagtccgag ggaactgaca gctatgtctc ccaactgaca gcagaggctg 1140

444 aagatcacct acagtcccc aacagagact ctctttatc aagcatgcc aatcttagag 1200

445 actctcccta tccggagagc agccctgaca tggaagaaga cctctctccc tccaggagga 1260

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DATE: 01/24/2002

PATENT APPLICATION: US/09/936,133

TIME: 12:52:51

Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

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446 gtgagaatga ggacatttac tataaaagca tgccaaatct tggagctggc catcagcttc 1320
447 agatgtgcta ccagatcagc aggggcaata gtgatggtta tataatcccc attaacaaaag 1380
448 aagggtgtat tccagaagga gatgttagag aaggacaaat gcagctgggtt acaagtcttt 1440
449 aatcatacag ctaaggaatt ccaagggccca catgcgagta ttaataaata aagacaccat 1500
450 tggcctgacg cagctccctc aaactctgct tgaagagatg actcttgacc tgtggttctc 1560
451 tgggtgtaaaa aagatgactg aaccttgca tctgtgaat ttttataaaa catacaaaaa 1620
452 ctttgtatat acacagagta tactaaagtg aattatttgt taaaaaagaa agagatgccca 1680
453 gccaggtatt ttaagattct gctgctgttt agagaaattg tgaacaagc aaaacaaaac 1740
454 tttccagcca ttttactgca gcagctctgt aactaaattt gtaaatatgg ctgcaccatt 1800
455 tttgtaggcc tgcattgtat tatatacaag acgtaggctt taaaatcctg tgggacaaat 1860
456 ttactgtacc ttactattcc tgacaagact tggaaaagca ggagagatat tctgcatcag 1920
457 tttgcagttc actgcaaate ttttacatta agggcaagat tgaaaacatg ctttaaccact 1980
458 agcaatcaag ccacaggcct tatttcatat gtttcctcaa ctgtacaatg aactattctc 2040
459 atgaaaaatg gctaaagaaa ttatatattt tctattgtct agggtaaaat aaatacattt 2100
460 gtgtccaact gaaatataat tgtcattaaa ataattttta agagtgaaga aaatattgtg 2160
461 aaaagctctt ggttgacatg gttatgaaat gttttttctt acactttgtc atggttaagt 2220
462 ctactcattt tcaattcttt tccactgtat acagtgttct gctttgacaa agttagtctt 2280
463 tattacttac atttaatttt cttattgcca aaagaacgtg ttttatggg agaaacaaac 2340
464 tctttgaagc cagttatgtc atgccttgca caaaagtgat gaaatctaga aaagattgtg 2400
465 tgtcaccctt gtttattctt gaacagaggg caaagagggc actgggcact tctcacaac 2460
466 tttctagtga acaaaagggt cctattcttt tttaaaaaaa taaaataaaa cataaatatt 2520
467 actcttccat attccttctg cctatatatta gtaattaatt tttttatga taaagtctta 2580
468 atgaaatgta aattgtttca gcaaaattct gctttttttt catcccttg tgtaaacctg 2640
469 ttaataatga gccatcact aatatccagt gtaaagttta acacggttg acagtaaata 2700
E--> 470 aatgtgaatt ttttcaagtt aaaaaaaaaa aa same
472 <210> SEQ ID NO: 19
473 <211> LENGTH: 276
474 <212> TYPE: DNA
475 <213> ORGANISM: homo sapiens
477 <400> SEQUENCE: 19
479 ctccctaaat gattttaaaa taaattggat aaacatatga tataaagtgg gtactttaga 60
480 aaccgccttt gcatattttt tatgtacaaa tctttgtata caattccgat gttccttata 120
481 tattccctat atagcaaac aaaccagga cctcccaact gcatgcctca agtccctgtg 180
482 gagcactctg gcaactggat ggcctactt gctttctgac aaaatagctg gaaaggagga 240
E--> 483 gggaccaatt aaatacctcg gccgcgacca cgctgg same
485 <210> SEQ ID NO: 20
486 <211> LENGTH: 2361
487 <212> TYPE: DNA
488 <213> ORGANISM: homo sapiens p.10
490 <400> SEQUENCE: 20
492 attgtaccag ccttgatgaa cgtgggcctt gcttcgcttt tgagggccat aagctcattg 60
493 cccactgggt tagaggctac cttatcattg tctcccgta ccggaaggtt tctcccaagt 120
494 cagagtttac cagcagggat tcacagagct ccgacaagca gattctaaac atctatgacc 180
495 tgtgcaacaa gttcatagcc tatagcaccg tctttgagga tgtagtggat gtgcttgctg 240
496 agtggggctc cctgtacgtg ctgacgcggg atgggcgggt ccacgcactg caggagaagg 300
497 acacacagac caaactggag atgctgttta agaagaacct atttgagatg gcgattaacc 360
498 ttgccaagag ccagcatctg gacagtgatg ggttgccca gattttcatg cagtatggag 420
499 accatctcta cagcaagggc aaccacgatg gggctgtcca gcaatatatc cgaaccattg 480
500 gaaagttgga gccatcctac gtgatccgca agtttctgga tgcccagcgc attcacaacc 540

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Input Set : A:\ES.txt
Output Set: N:\CRF3\01242002\I936133.raw

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501 tgactgccta cctgcagacc ctgcaccgac aatccctggc caatgccgac cataccaccc 600
502 tgctcctcaa ctgctatacc aagctcaagg acagctcgaa gctggaggag ttcatacaaga 660
503 aaaagagtga gagtgaagtc cactttgatg tggagacagc catcaaggtc ctccggcagg 720
504 ctggctacta ctcccatgcc ctgtatctgg cggagaacca tgcacatcat gagtgggtacc 780
505 tgaagatcca gctagaagac attaagaatt atcaggaagc ccttcgatac atcggcaagc 840
506 tgccttttga gcaggcagag agcaacatga agcgtacgg caagatcctc atgcaccaca 900
507 taccagagca gacaactcag ttgctgaagg gactttgtac tgattatcgg cccagcctcg 960
508 aaggccgcag cgatagggag gcccaggct gcagggccaa ctctgaggag ttcataccca 1020
509 tctttgccaa taaccgcga gagctgaaag ccttcctaga gcacatgagt gaagtgcagc 1080
510 cagactcacc ccaggggatc tacgacacac tcttgagct gcgactgcag aactgggccc 1140
511 acgagaagga tccacaggtc aaagagaagc ttcacgcaga ggccatttcc ctgctgaaga 1200
512 gtggctcgctt ctgcgacgtc tttgacaagg ccttggtcct gtgccagatg cagcacttcc 1260
513 aggatggtgt cctttacctt tatgagcagg ggaagctgtt ccagcagatc atgcactacc 1320
514 acatgcagca cgagcagtac cggcagggtc tccagcgtgt tgagcgccat ggggagcagg 1380
515 acccctcctt gtgggagcag gccctcagct acttgcctcg caaggaggag gactgcaagg 1440
516 agtatgtggc agctgtcctc aagcatatcg agaacaagaa cctcatgcca cctcttctag 1500
517 tgggtgcagac cctggcccac aactccacag ccacactctc cgtcatcagg gactacctgg 1560
518 tccaaaaact acagaaacag agccagcaga ttgcacagga tgagctgcgg gtgcccgggt 1620
519 accgagagga gaccaccgt atccgcagg agatccaaga gctcaaggcc agtccctaaga 1680
520 ttttccaaaa gaccaagtgc agcatctgta acagtgcctt ggagttgccc tcagtcact 1740
521 tctgtgtgg ccactcctc caccaacact gctttgagag ttactcgga agtgatgctg 1800
522 actgccccac ctgctcctc gaaaaccgga aggtcatgga tatgatccgg gccaggaac 1860
523 agaaacgaga tctccatgat caattccagc atcagctcaa gtgctccaat gacagctttt 1920
524 ctgtgattgc tgactacttt ggcagagggt ttttcaaca attgactctg ctgaccgacc 1980
525 ctcccacagc cagactgacc tccagcctgg aggtgggt gcaacgcgac ctactcatgc 2040
526 actccaggag gggcacttaa gcagcctgga ggaagatgtg ggcaacagtg gaggaccaag 2100
527 agaacagaca caatgggacc tgggcgggcg ttacacagaa ggctggctga catgcccagg 2160
528 gctccactct catctaattg cacagccctc acaagactaa agcggaaact tttcttttcc 2220
529 ctggccttcc ttaatttta gtcaagcttg gcaatccctt cctctttaac taggcagggtg 2280
530 ttagaatcat ttccagatta atggggggga aggggaacct caggcaaac tctgaagtt 2340

```

E--> 531 ttggaaaaaa aagctggtt c

1770 <210> SEQ ID NO: 60

1771 <211> LENGTH: 747

1772 <212> TYPE: DNA

1773 <213> ORGANISM: homo sapiens

1775 <400> SEQUENCE: 60

```

1777 tttttcaa at cacatatggc ttctttgacc ccatcaaata actttattca cacaaacgtc 60
1778 ccttaattta caaagcctca gtcattcata cacattaggg gatccacagt gttcaaggaa 120
1779 cttaaatata atgtatcata ccaaccgaag taaaccaagt acaaaaaata ttcataataa 180
1780 gttgttcaca cgtaggtcct agattaccag cttctgtgca aaaaaaggaa atgaagaaaa 240
1781 atagatttat taactagtat tggaaactaa ctttgtgcct ggcttaaaac ctccctcagc 300
1782 ctgctgtgtc ccacacaaat gttaagaag tcaactgcaat gtactccccg gctctgatga 360
1783 aaagaagccc ctggcacaaa agattccagt gcccctgaag aggtccctt cctcctgtgg 420
1784 gctctcctag aaaaccagcg ggacggcctc cctgctgata ccgtctataa ccttaggggg 480
1785 cctcgggcca ggcaacggca gtggactcat ctcggtgatg gctgtagatg ctaacactgg 540
1786 ccaattcaat gccacaccta ctggttacct tttgagggca tttctccaga cagaagcccc 600
1787 ttgaagccta ggtagggcag gatcagagat acaccgtgt ttgtctcgaa gggctccaca 660
1788 gccagtaag acatgcttgc agaagtagta tctctggact tctgcctcca gtcgaccggc 720

```

E--> 1789 gcggaattta gtagtaatag cggccgc

The types of errors shown exist throughout
the Sequence Listing. Please check all
sequences for similar errors.

see p 11

RAW SEQUENCE LISTING

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Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

E--> 1791 sequence listing/ 20.12.01
E--> 1793 -2-

delete

VERIFICATION SUMMARY

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DATE: 01/24/2002

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Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

L:3 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION:
L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:55 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1835 SEQ:1
L:74 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:581 SEQ:2
L:91 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:516 SEQ:3
L:118 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1099 SEQ:4
L:143 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1015 SEQ:5
L:190 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2313 SEQ:6
L:205 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:389 SEQ:7
L:216 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:157 SEQ:8
L:234 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:561 SEQ:9
L:268 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1508 SEQ:10
L:283 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:389 SEQ:11
L:308 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:981 SEQ:12
L:323 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:401 SEQ:13
L:348 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1002 SEQ:14
L:361 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:280 SEQ:15
L:404 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2041 SEQ:16
L:416 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:235 SEQ:17
L:470 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2732 SEQ:18
L:483 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:276 SEQ:19
L:531 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2361 SEQ:20
L:542 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:179 SEQ:21
L:566 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:905 SEQ:22
L:610 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2134 SEQ:23
L:646 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1626 SEQ:24
L:678 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1420 SEQ:25
L:698 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:689 SEQ:26
L:714 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:471 SEQ:27
L:738 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:929 SEQ:28
L:776 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1775 SEQ:29
L:811 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1546 SEQ:30
L:832 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:750 SEQ:31
L:925 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2968 SEQ:33
L:1037 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:6011 SEQ:34
L:1198 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:716 SEQ:36
L:1213 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:395 SEQ:37
L:1224 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:134 SEQ:38
L:1243 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:644 SEQ:39
L:1262 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:657 SEQ:40
L:1293 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1328 SEQ:41
L:1318 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:987 SEQ:42
L:1342 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:956 SEQ:43
L:1359 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:536 SEQ:44
L:1395 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1630 SEQ:45
L:1406 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:169 SEQ:46
L:1427 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:769 SEQ:47

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/936,133

DATE: 01/24/2002

TIME: 12:52:52

Input Set : A:\ES.txt

Output Set: N:\CRF3\01242002\I936133.raw

L:1478 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2529 SEQ:48
L:1512 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1552 SEQ:49
L:1536 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:921 SEQ:50
L:1550 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:338 SEQ:51
L:1578 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1191 SEQ:52
L:1791 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:60
L:1791 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:1793 M:252 E: No. of Seq. differs, <211>LENGTH:Input:747 Found:765 SEQ:60
